

CLAIMS:

1. A splice connector comprising:
a clam-shell housing including a first portion attached to a second portion via a sliding hinge, the housing defining a first cable seat and a second cable seat, each seat for receiving an associated cable to be spliced to another
5 associated cable in the other seat;
a first insulation displacement connection (IDC) terminal received in the housing, wherein the first IDC terminal includes a first prong aligned with the first cable seat and a second prong aligned with the second cable seat, whereby the
10 first IDC terminal electrically connects a wire of the first associated cable to a wire of the second associated cable.
2. The splice connector of claim 1, further comprising a notch formed in the first portion of the housing opposite the hinge and adjacent one of the cable seats, and an alignment member disposed on the second portion, wherein the notch receives the alignment member when the clamshell housing closes.
3. The splice connector of claim 1, wherein the sliding hinge includes a catch adapted to limit the movement in one direction of the first portion in relation to the second portion.
4. The splice connector of claim 1, wherein the sliding hinge is adapted such that the first portion is selectively removable from the second portion.
5. The splice connector of claim 1, further comprising a second IDC terminal spaced from the first IDC terminal in a first direction, wherein the second IDC terminal includes a first prong aligned with the first cable seat and a second prong aligned with the second cable seat.
6. The splice connector of claim 5, further comprising a third IDC terminal spaced from the first IDC terminal in a second direction, which is generally perpendicular to the first direction, and a fourth IDC terminal spaced

from the first IDC terminal in a second direction and the third IDC terminal in a
5 direction generally parallel to the first direction.

7. The splice connector of claim 1, further comprising a boss
extending from the first portion spanning between the first cable seat and the
second cable seat.

8. A splice connector comprising:
a first housing defining first and second cable receptacles spaced from
one another in a first direction;
a second housing attached to the first housing; and
5 first and second terminals spaced from one another in a second direction
generally parallel to the first direction and received in the first housing, wherein
each terminal includes a first prong aligned with the first cable receptacle and a
second prong aligned with the second cable receptacle.

9. The splice connector of claim 8, wherein the first housing includes a
resilient clip and the second housing includes a catch that cooperates with the
resilient clip to selectively attach the first housing to the second housing.

10. The splice connector of claim 8, wherein the first housing includes a
first opening interposed between the first and second cable receptacles and the
second housing includes a second opening that aligns with the first opening to
receive a fastener to selectively attach the first housing to the second housing.

11. The splice connector of claim 8, further comprising third and fourth
terminals received in the second housing and spaced from one another in a
direction generally parallel to the second direction.

12. The splice connector of claim 8, wherein the first housing includes a
hoop-shaped appendage defining an elongated slot and the second housing
includes a pin received in the slot.

13. The splice connector of claim 12, wherein the first housing includes catches formed on an inner surface of the slot.

14. The splice connector of claim 12, wherein the hoop-shaped appendage is discontinuous forming a side opening in therein, wherein the side opening has a diameter approximately equal to the diameter of the pin.

15. The splice connector of claim 8, further comprising a boss extending from one of the first housing and the second housing interposed between the cable receptacles.

16. A method for splicing two electrical cables, wherein each cable includes at least two conductive wires and insulation material around each wire, with a splice connector having a clam-shell housing, the method comprising:

5 positioning first and second cables in respective first and second seats in a first housing portion of the clam-shell housing;

rotating a second housing portion of the clam-shell housing, which is attached to the first housing portion, in relation to the first housing portion;

at least substantially linearly moving at least one of the first housing portion and the second housing portion in relation to the other housing portion;

10 and

piercing the insulation material of the first and second cable with an IDC terminal received in one of the housings to contact a first of the at least two wires in each cable.

17. The method of claim 16, further comprising piercing the insulation material of the first and second cable with another IDC terminal received in the other of the housings to contact a second of the at least two wires in each cable.

18. The method of claim 17, further comprising piercing the insulation material of the first and second cable with another IDC terminal received in one of the housings to contact the first of the at least two wires in each cable.

19. An LED light engine comprising:

a first electrical cable having at least two wire conductors;
at least one LED mounted to the first cable and electrically
connected to the at least two conductors in the first cable;
a second electrical cable having at least two wire conductors;
at least one LED mounted to the second cable and electrically
connected to the at least two conductors in the second cable; and
a splice connector comprising a clam-shell housing having a sliding
hinge, wherein the clam-shell housing receives the first electrical cable and the
second electrical.

20. A channel letter housing receiving the LED light engine of claim 19.